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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

| EXAMINER | |
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| HICKS, CHARLES V | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/586,131 | SAITO, MASAO | |
| | Examiner | Art Unit | |
| | CHARLES HICKS | 2629 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *27 August 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *12-23 and 25-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12-23, 25-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 July 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

This communication is responsive to a Request for Continued Examination filed 08/27/2010. Claims 12-23 and 25-27 have been amended. Claims 12-23 and 25-30 are currently pending.

### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 23 and 28-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed "computer-readable recording medium" is not limited to only statutory embodiments of the medium. The current specification discloses only exemplary possibilities for the medium, not specific, limited definitions (current spec, pg. 1-2, par. 1, 18). As such, giving the medium the broadest reasonable interpretation, the medium could encompass signals and waveforms, which are non-statutory.

For more information, please see:

http://www.uspto.gov/patents/law/notices/101_crm_20100127.pdf.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 12-23, 25-26 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ghercioiu et al. (US 2004/0010734) in view of Hasako et al. (US 2003/0093715), and further in view of Keele et al. (US 2005/0086695).

In reference to claim 12, Ghercioiu teaches a programmable display apparatus (Ghercioiu, pg. 1, par. 10),

comprising: storage means for storing a control program having a plurality of instructions and symbol data for displaying a plurality of symbols related to each of said plurality of instructions (Ghercioiu, pg. 14, par. 233);

control means for controlling control target equipment electrically connected to said programmable display apparatus by executing each of said plurality of instructions (Ghercioiu, pg. 1, par. 7);

display means for displaying an image (Ghercioiu, pg. 2, par. 12);

first display control means based on the symbol data corresponding to the instructions executed by said control means for causing the symbols corresponding to

said executed instructions to be displayed in a first display region in said display means (Ghercioiu, pg. 1, par. 7);

video signal input means for receiving an input of video data generated based on a picked-up image of said control target equipment for each of the instructions (Ghercioiu, Fig. 3, Video; pg. 7, par. 80);

video data storing means for storing said video data (Ghercioiu, Fig. 3, Video, Main Memory; pg. 7, par. 80);

determining means for determining abnormality of the control target equipment (Ghercioiu, pg. 14, par. 233, certain detected events; pg. 14-15, par. 240, process data to generate a certain result; pg. 15, par. 242, data acquired or generated for display and/or analysis; one of ordinary skill in the art would appreciate that Ghercioiu suggests the determining means for determining abnormality because the "certain detected events", "generated for display and analysis" in Ghercioiu are functionally equivalent to the claimed "determining means for determining abnormality" in the context of the claim),

detection means for detecting, upon determination of the abnormality by the determining means, designation of a symbol associated with a signal indicating the determined abnormality of the control target equipment among the plurality of symbols displayed in said first display region (Ghercioiu, pg. 7, par. 82; pg. 14-15, par. 240; pg. 15, par. 242),

Ghercioiu however fails to teach a relation means for relating the symbol data corresponding to the instructions executed by said control means to the video data

stored in said video data storing means; and second display control means responsive to detection of said designation for causing a moving image to be displayed in a second display region in said display means based on the video data related to the symbol data corresponding to the symbol displayed in said first display region.

Hasako discloses a display apparatus, analogous in art with that of Ghercioiu, comprising a relation means for relating the symbol data corresponding to the instructions executed by said control means to the video data stored in said video data storing means (Hasako, Fig. 12, 13(a); pg. 1, par. 15-17; pg. 17, par. 376, 377);

and second display control means responsive to detection of said designation for causing a moving image to be displayed in a second display region in said display means based on the video data related to the symbol data corresponding to the symbol displayed in said first display region (Hasako, Fig. 12, 13(a); pg. 17, par. 376, 377).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the display apparatus of Ghercioiu such that there is a relation means for relating the symbol data corresponding to the instructions executed by said control means to the video data stored in said video data storing means; and second display control means responsive to detection of said designation for causing a moving image to be displayed in a second display region in said display means based on the video data related to the symbol data corresponding to the symbol displayed in said first display region, as taught by Hasako.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to carry out inspection and troubleshooting of a process in sync with a displayed video image of the process.

Ghercioiu as modified by Hasako however fails to teach wherein the control means displays the moving image of at least one of a time period from a predetermined time previous to said detection and a time period to a predetermined time after said detection.

Keele discloses a display system comprising event detection, analogous in art with that of Ghercioiu as modified by Hasako, wherein the control means displays the moving image of at least one of a time period from a predetermined time previous to said detection and a time period to a predetermined time after said detection (Keele, pg. 10, par. 143).

At the time the invention was made it would have been obvious to one of ordinary skill in the art to combine the display apparatus of Ghercioiu as modified by Hasako wherein the control means displays the moving image of at least one of a time period from a predetermined time previous to said detection and a time period to a predetermined time after said detection, as taught by Keele.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to enable the user to focus in on a particular time period for analysis or troubleshooting.

Claim 13 is rejected as being dependent on rejected claim 12 as discussed above and further, Ghercioiu fails to teach further comprising: timer means for measuring a time, wherein said relation means relates the symbol data corresponding to the symbols displayed in said first display region to the video data input through said video signal input means based on the time measured by said timer means.

Hasako discloses a display apparatus, analogous in art with that of Ghercioiu, further comprising timer means for measuring a time, wherein said relation means relates the symbol data corresponding to the symbols displayed in said first display region to the video data input through said video signal input means based on the time measured by said timer means (Hasako, pg. 17, par. 397-399).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the display apparatus of Ghercioiu such that it further comprises timer means for measuring a time, wherein said relation means relates the symbol data corresponding to the symbols displayed in said first display region to the video data input through said video signal input means based on the time measured by said timer means, as taught by Hasako.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to carry out inspection and troubleshooting of a process in sync with a displayed video image of the process.

Claim 14 is rejected as being dependent on rejected claim 13 as discussed above and further, Ghercioiu as modified by Hasako teaches further comprising: state

signal input means for receiving an input of a state signal indicating a state of said control target equipment (Ghercioiu, pg. 14, par. 233);

log generation means for generating log information representing history of an operation of said control target equipment based on said time and said state signal (Ghercioiu, pg. 14, par. 233);

and log storing means for storing said log information (Ghercioiu, pg. 14, par. 233),

wherein said relation means relates the symbol data corresponding to the symbols displayed in said first display region to said log information (Hasako, pg. 17, par. 397-399).

Claim 15 is rejected as being dependent on rejected claim 14 as discussed above and further, Ghercioiu as modified by Hasako teaches wherein said state signal input means receives an input of said signal indicating an abnormality in said control target equipment (Ghercioiu, pg. 14, par. 233);

said log generation means generates log information indicating an abnormality in said control target equipment when said signal indicating an abnormality is input (Ghercioiu, pg. 14, par. 233);

said relation means relates a time at which said log information indicating an abnormality is generated to said log information indicating an abnormality for storage in said log storing means (Hasako, Fig. 13a; pg. 17, par. 376),

and said first display control means causes the symbols to be displayed in said first display region by making a difference between an output form of the symbol data for displaying the symbols corresponding to said log information indicating an abnormality and an output form of the symbol data for displaying the symbols corresponding to a normal state in said control target equipment, so that a first display manner in said display means of the symbols corresponding to said log information indicating an abnormality differs from a second display manner in said display means of the symbols corresponding to said normal state (Ghercioiu, pg. 14, par. 233).

Claim 16 is rejected as being dependent on rejected claim 15 as discussed above and further, Ghercioiu teaches wherein said detection means detects designation of the symbols displayed in said first display manner (Ghercioiu, pg. 14, par. 233).

Ghercioiu however fails to teach said display apparatus further comprising: reading means for reading time corresponding to said log information indicating an abnormality from said log storing means based on detection of said designation.

Hasako discloses a display apparatus, analogous in art with that of Ghercioiu, further comprising: reading means for reading time corresponding to said log information indicating an abnormality from said log storing means based on detection of said designation (Hasako, Fig. 13a; pg. 17, par. 376).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the display apparatus of Ghercioiu such that there is a reading means for reading time corresponding to said log information indicating an

abnormality from said log storing means based on detection of said designation, as taught by Hasako.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to carry out inspection and troubleshooting of a process in sync with a displayed video image of the process.

Ghercioiu as modified by Hasako however fails to teach a reproduction means for reading video data corresponding to a predetermined period of time from said read time, wherein said second display control means causes a moving image to be displayed in said second display region based on the video data read by said reproduction means.

Keele discloses a display system, analogous in art with that of Ghercioiu as modified by Hasako, with a reproduction means for reading video data corresponding to a predetermined period of time from said read time (Keele, pg. 10, par. 143),

wherein said second display control means causes a moving image to be displayed in said second display region based on the video data read by said reproduction means (Keele, Abstract; pg. 10, par. 143).

At the time the invention was made it would have been obvious to one of ordinary skill in the art to combine the display apparatus of Ghercioiu as modified by Hasako such that there is a reproduction means for reading video data corresponding to a predetermined period of time from said read time, wherein said second display control means causes a moving image to be displayed in said second display region based on the video data read by said reproduction means, as taught by Keele.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to enable the user to focus in on a particular time period for analysis or troubleshooting.

Claim 17 is rejected as being dependent on rejected claim 16 as discussed above and further, Ghercioiu as modified by Keele however fails to teach wherein said display means displays said first display region and said second display region in the same screen.

Hasako discloses a display apparatus, analogous in art with that of Ghercioiu modified by Keele wherein said display means displays said first display region and said second display region in the same screen (Hasako, Fig. 13a.).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the display apparatus of Ghercioiu as modified by Keele wherein said display means displays said first display region and said second display region in the same screen, as taught by Hasako.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to carry out inspection and troubleshooting of a process in sync with a displayed video image of the process.

Claim 18 is rejected as being dependent on rejected claim 15 as discussed above and further Ghercioiu as modified by Hasako teaches wherein said detection

means detects designation of the symbols displayed in said first display manner (Ghercioiu, pg. 14, par. 233),

said programmable display apparatus further comprising: reading means for reading time corresponding to said log information indicating an abnormality from said log storing means based on detection of said designation (Ghercioiu, pg. 14, par. 233).

Ghercioiu as modified by Hasako however fails to teach a reproduction means for reading video data corresponding to a period of time from predetermined time previous to said time to predetermined time subsequent to said time, wherein said second display control means causes a moving image to be displayed in said second display region based on the video data read by said reproduction means.

Keele discloses a display system, analogous in art with that of Ghercioiu as modified by Hasako, such that there is a reproduction means for reading video data corresponding to a period of time from predetermined time previous to said time to predetermined time subsequent to said time (Keele, pg. 10, par. 143),

wherein said second display control means causes a moving image to be displayed in said second display region based on the video data read by said reproduction means (Keele, Abstract; pg. 10, par. 143).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the display apparatus of Ghercioiu as modified by Hasako such that there is a reproduction means for reading video data corresponding to a period of time from predetermined time previous to said time to predetermined time subsequent to said time, wherein said second display control means causes a moving

image to be displayed in said second display region based on the video data read by said reproduction means, as taught by Keele.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to enable the user to focus in on a particular time period for analysis or troubleshooting.

Claim 19 is rejected as being dependent on rejected claim 18 as discussed above and further, Ghercioiu as modified by Keele however fails to teach wherein said display means displays said first display region and said second display region in the same screen.

Hasako discloses a display apparatus, analogous in art with that of Ghercioiu as modified by Keele wherein said display means displays said first display region and said second display region in the same screen (Hasako, Fig. 13a.).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the display apparatus of Ghercioiu as modified by Keele wherein said display means displays said first display region and said second display region in the same screen, as taught by Hasako.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to carry out inspection and troubleshooting of a process in sync with a displayed video image of the process.

Claim 20 is rejected as being dependent on rejected claim 15 as discussed above and further, Ghercioiu as modified by Hasako teaches wherein said second display control means (Hasako, Fig. 13a; pg. 17, par. 376),

includes time data reading means for reading each time corresponding to each of said plurality of symbols from said log storing means (Ghercioiu, pg. 14, par. 233).

Ghercioiu as modified by Hasako above does not expressly disclose video data reading means for reading video data corresponding to a predetermined period of time from said read each time for each of said plurality of symbols from said log storing means.

However, Hasako additionally teaches a display apparatus, analogous in art with that of Ghercioiu such that there is a reading means for reading video data corresponding to a predetermined period of time from said read each time for each of said plurality of symbols from said log storing means (Hasako, pg. 1, par. 15-17; pg. 17, par. 376).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to further modify the display apparatus of Ghercioiu in view of Hasako above wherein there is a reading means for reading video data corresponding to a predetermined period of time from said read each time for each of said plurality of symbols from said log storing means, as taught by Hasako.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to carry out inspection and troubleshooting of a process in sync with a displayed video image of the process.

Ghercioiu as modified by Hasako does not expressly disclose a reproduction control means for causing a moving image to be displayed in said second display region in time order or backward in time from said time corresponding to any symbol of which said designation is detected based on said read video data.

Keele discloses a display system, analogous in art with that of Ghercioiu as modified by Hasako, such that there is a reproduction control means for causing a moving image to be displayed in said second display region in time order or backward in time from said time corresponding to any symbol of which said designation is detected based on said read video data (Keele, pg. 10, par. 143).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the display apparatus of Ghercioiu as modified by Hasako such that there is a reproduction means for reading video data corresponding to a period of time from predetermined time previous to said time to predetermined time subsequent to said time, as taught by Keele.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to enable the user to focus in on a particular time period for analysis or troubleshooting.

Claim 21 is rejected as being dependent on rejected claim 20 as discussed above and further, Ghercioiu as modified above by Hasako and further in view of Keele does not expressly disclose wherein said display means displays said first display region and said second display region in the same screen.

However, Hasako additionally teaches a display apparatus, analogous in art with that of Ghercioiu in view of Keele wherein said display means displays said first display region and said second display region in the same screen (Hasako, Fig. 13a.).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the display apparatus of Ghercioiu in view of Keele wherein said display means displays said first display region and said second display region in the same screen, as taught by Hasako.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to carry out inspection and troubleshooting of a process in sync with a displayed video image of the process.

Claim 22 is rejected as being dependent on rejected claim 12 as discussed above and further, Ghercioiu as modified by Hasako teaches wherein said video signal input means receives an input of each video data generated based on an image of said control target equipment picked up by each of a plurality of image picking-up means (Ghercioiu, pg. 7, par. 80),

said relation means relates each symbol data corresponding to each of a plurality of instructions executed by said control means to said each video data and said second display control means causes each moving image to be displayed in said second display region based on said each video data (Hasako, pg. 1, par. 15-17; pg. 17, par. 376).

In reference to claim 23, Ghercioiu teaches a computer-readable recording medium storing thereon a program causing a computer to function as a programmable display apparatus (Ghercioiu, pg. 14, par. 233),

said program causing said computer to execute the steps of: reading a control program having a plurality of instructions and each symbol data for displaying a plurality of symbols related to each of said plurality of instructions from storage means for storing data (Ghercioiu, pg. 14, par. 233),

controlling control target equipment electrically connected to said computer by executing each of said plurality of instructions (Ghercioiu, pg. 1, par. 7);

based on the symbol data corresponding to the instructions executed at said controlling step (Ghercioiu, pg. 1, par. 7);

causing the symbols corresponding to said executed instructions to be displayed in a first display region in display means for displaying an image (Ghercioiu, pg. 1, par. 7);

receiving an input of video data generated based on a picked-up image of said control target equipment for each of the instructions (Ghercioiu, Fig. 3, Video; pg. 7, par. 80);

storing said video data in said storage means (Ghercioiu, Fig. 3, Video, Main Memory; pg. 7, par. 80);

determining abnormality of the control target equipment (Ghercioiu, pg. 14, par. 233, certain detected events; pg. 14-15, par. 240, process data to generate a certain result; pg. 15, par. 242, data acquired or generated for display and/or analysis; one of

ordinary skill in the art would appreciate that Ghercioiu suggests determining abnormality because the “certain detected events”, “generated for display and analysis” in Ghercioiu are functionally equivalent to the claimed “determining abnormality” in the context of the claim),

detecting, upon determining abnormality, designation of a symbol associated with a signal indicating the determined abnormality of the control target equipment among the plurality of symbols displayed in said first display means (Ghercioiu, pg. 7, par. 82; pg. 14-15, par. 240; pg. 15, par. 242).

Ghercioiu however fails to teach relating the symbol data corresponding to said executed instructions to said video data; and in response to detection of said designation, causing moving images relating to the designated symbols to be displayed in a second display region in said display means based on the video data related to the symbol data corresponding to the designated symbols displayed in said first display region.

Hasako discloses a display apparatus, analogous in art with that of Ghercioiu, relating the symbol data corresponding to said executed instructions to said video data (Hasako, pg. 1, par. 15-17; pg. 17, par. 376);

and in response to detection of said designation, causing moving images relating to the designated symbols to be displayed in a second display region in said display means based on the video data related to the symbol data corresponding to the symbol displayed in said first display region (Hasako, Fig. 13a; pg. 17, par. 376).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the display apparatus of Ghercioiu such that there is a relation means for relating the symbol data corresponding to the instructions executed by said control means to the video data stored in said video data storing means; and second display control means responsive to detection of said designation for causing moving images relating to the designated symbols to be displayed in a second display region in said display means based on the video data related to the symbol data corresponding to the symbol displayed in said first display region, as taught by Hasako.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to carry out inspection and troubleshooting of a process in sync with a displayed video image of the process.

Ghercioiu as modified by Hasako however fails to teach wherein a display region displays the moving image during a period of at least one of prior to and after said detection.

Keele discloses a display system comprising event detection, analogous in art with that of Ghercioiu as modified by Hasako, wherein a display region displays the moving image during a period of at least one of prior to and after said detection (Keele, pg. 10, par. 143).

At the time the invention was made it would have been obvious to one of ordinary skill in the art to combine the display apparatus of Ghercioiu as modified by Hasako wherein a display region displays the moving image during a period of at least one of prior to and after said detection, as taught by Keele.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to enable the user to focus in on a particular time period for analysis or troubleshooting.

Claim 25 is rejected as being dependent on rejected claim 12 as discussed above and further, Ghercioiu as modified by Hasako and Keele teaches wherein the second display means (Hasako, Fig. 12, 13(a); pg. 17, par. 376,377),

is configured to start reproduction from an image associated with a symbol of the plurality of symbols (Hasako, Fig. 12, 13(a); pg. 1, par 15-17; pg. 17, par. 375-377; reproduction of video image B, started from image A),

said symbol being associated with an abnormality (Ghercioiu, pg. 14, par. 233, certain detected events; pg. 14-15, par. 240, process data to generate a certain result; pg. 15, par. 242, data acquired or generated for display and/or analysis; one of ordinary skill in the art would appreciate that Ghercioiu suggests the symbol being associated with an abnormality because the “certain detected events”, “generated for display and analysis” in Ghercioiu are functionally equivalent to the claimed “symbol being associated with an abnormality” in the context of the claim).

Claim 26 is rejected as being dependent on rejected claim 25 as discussed above and further, Ghercioiu as modified by Hasako and Keele teaches wherein the second display means (Hasako, Fig. 12, 13(a); pg. 17, par. 376,377),

displays an image at every predetermined period of time or a snap shot for each of the plurality of symbols (Keele, pg. 11, par. 149).

Claim 28 is rejected as being dependent on rejected claim 23 as discussed above and further, Ghercioiu as modified by Hasako and Keele teaches wherein said program causes the computer to execute the step of starting reproduction from an image associated with a symbol of the plurality of symbols (Hasako, Fig. 12, 13(a); pg. 1, par 15-17; pg. 17, par. 375-377; reproduction of video image B, started from image A),

said symbol being associated with an abnormality (Ghercioiu, pg. 14, par. 233, certain detected events; pg. 14-15, par. 240, process data to generate a certain result; pg. 15, par. 242, data acquired or generated for display and/or analysis; one of ordinary skill in the art would appreciate that Ghercioiu suggests the symbol being associated with an abnormality because the “certain detected events”, “generated for display and analysis” in Ghercioiu are functionally equivalent to the claimed “symbol being associated with an abnormality” in the context of the claim).

Claim 29 is rejected as being dependent on rejected claim 28 as discussed above and further, Ghercioiu as modified by Hasako and Keele teaches wherein said step of starting reproduction includes the step of displaying an image at every predetermined period of time or a snap shot for each of the plurality of symbols (Keele, pg. 11, par. 149).

Claims 27 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ghercioiu et al. (US 2004/0010734) in view of Hasako et al. (US 2003/0093715) and Keele et al. (US 2005/0086695) and further in view of Applicant's Admitted Prior Art (AAPA).

Claim 27 is rejected as being dependent on rejected claim 26 as discussed above and further, Ghercioiu as modified by Hasako and Keele teaches a control program (Ghercioiu, pg. 14, par. 233),

includes the plurality of symbols (Ghercioiu, pg. 14, par. 233).

Ghercioiu however fails to teach wherein the control program is a ladder program.

Applicants admitted prior art teaches wherein the control program is a ladder program (current specification summary, pg. 1, par. 7).

At the time the invention was made, it would have been obvious to one having ordinary skill in the art to modify the control program of Ghercioiu, wherein the control program is a ladder program, as taught by Applicants Admitted Prior Art.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been so that programmable logic controller information can be recognized so that whether or not a logic circuit is established can easily be determined (current specification summary, pg. 1, par. 7).

Claim 30 is rejected as being dependent on rejected claim 29 as discussed above and further, Ghercioiu as modified by Hasako and Keele teaches a control program (Ghercioiu, pg. 14, par. 233),

includes the plurality of symbols (Ghercioiu, pg. 14, par. 233).

Ghercioiu however fails to teach wherein the control program is a ladder program.

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As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been so that programmable logic controller information can be recognized so that whether or not a logic circuit is established can easily be determined (current specification summary, pg. 1, par. 7).

### ***Response to Arguments***

Applicant's arguments filed 08/27/2010 have been fully considered but they are not persuasive.

As to claims 12-23 and 25-30, applicants argue on pages10-13 of applicant's response that the cited prior art of record differs from the current invention in 3 ways: that the Ghercioiu system does not (1), "communicate with the control target equipment

and the image pick-up means by transmitting a command and receiving data which indicates a state of the control target equipment"; (2), that, in the Ghercioiu system, it is "necessary to have graphical program development environment 201", while in contrast, "according to an aspect of the claimed invention, the programmable display apparatus 100 does not have the graphical development environment 201"; and that (3), "the target system 186 does not receive a program to be executed by the system and consequently, no program which is transmitted by the programmable display apparatus is installed in the target system 186".

(1) Ghercioiu teaches communicating with the control target equipment and the image pick-up means by transmitting a command and receiving data which indicates a state of the control target equipment (Ghercioiu, pg. 14, par. 233-234; pg. 5, par. 58); (2) the current invention contains a graphical development environment (Current Specification, Fig. 1, Touch Panel 116, Processing Units 140 and 142); and (3), the target system receives a program to be executed by the system (Current Specification, pg. 1, par. 3, a control signal based on instruction and exerting control according to the instruction).

As to difference (1), Ghercioiu teaches using a target device such as a smart camera (Ghercioiu, pg. 5, par. 58) communicating with a programmable display apparatus, a computer system, to provide acquired images and data, indicating a state of a device, allowing the user to provide input to and/or view output from a target device (Ghercioiu, pg. 14, par. 233-234). As to (2) and (3), in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that

the features upon which applicant relies (i.e., a graphical development environment, and a target system not receiving a program to be executed) are not recited in the claims. Further, applicants Touch Panel 116 and Processing Units 140 and 142, in applicants Fig. 1 correspond to a "graphical development environment", and applicants control signal based on instruction and exerting control according to the instruction (Current Specification, pg. 1, par. 3), corresponds to a "target system receives a program to be executed by the system". The claims as presented are absent any language that would preclude such an interpretation.

Applicants argue on pages 13-15 of applicant's response that the cited prior art of record fails to teach the claimed "video signal input means" and "video data storing means".

Ghercioiu teaches video signal input means and video data storage means (Ghercioiu, Fig. 3, pg. 7, par. 80).

Ghercioiu discloses a video signal input from a smart camera (Ghercioiu, Fig. 3, Video; pg. 7, par. 80, video display subsystem; pg. 5, par. 58, smart camera; pg. 5, par. 67, camera; pg. 14, par. 235, smart camera) as an input device to acquire images and sends the images to a host computer (Ghercioiu, pg. 5, par. 63, 65). Further, Ghercioiu discloses a Main Memory and Memory Controller connected to an Expansion Bus interfacing with video (Ghercioiu, Fig. 3), and that a processor and memory may be included (Ghercioiu, pg. 5, par. 60, 62). Ghercioiu teaches receiving and storing data (Ghercioiu, pg. 7, par. 79) for display on the video display subsystem (Ghercioiu, pg. 7, par. 80), memory management of input/output data (Ghercioiu, pg. 9, par. 103), data

stored in memory locations of a target device (Ghercioiu, pg. 12. par. 163; pg. 13, par. 208), viewing the output of a smart camera image acquisition target device (Ghercioiu, pg. 14, par. 234, 235) as a result of an image processing function, and acquired data from a target device transmitted over a network for display (Ghercioiu, Fig. 3; pg. 14-15, par. 240).

Therefore, Ghercioiu teaches video signal input means and video data storing means.

## ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES HICKS whose telephone number is 571-270-7535. The examiner can normally be reached on Monday-Thursday from 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz, can be reached at 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Sumati Lefkowitz/
Supervisory Patent Examiner, Art Unit 2629